Suggested Media and Public Outreach Activities

PRESIDENTIAL AWARDS FOR EXCELLENCE IN MATHEMATICS AND SCIENCE TEACHING

Prepared by
The Widmeyer-Baker Group
Communications Support Contractor for the NSF Presidential Awards for Excellence in
Mathematics and Science Teaching
June 1998

Forward

The Widmeyer-Baker Group is a full-service communications firm specializing in the development and implementation of outreach strategies surrounding public affairs and policy issues. We pride ourselves on our ability to create and deliver messages that resonate with decision makers and the public, to turn controversial or unknown proposals into well-received ideas, and to translate complex concepts into easily understood and accepted propositions.

We have developed this guide as an introduction to public relations and grassroots communications for the winners of the Presidential Awards for Excellence in Mathematics and Science Teaching. It provides a map to guide you in delivering your ideas, in making the most of public speaking engagements, and in dealing with print and broadcast media. The guide, and a briefing session to take place during your time in Washington, are aimed at making it easier for you to speak up and speak out for excellence in math and science education. By attracting the attention of talented teachers to the Presidential Awards program, you will be making your state's selection process more competitive and increasing its visibility among the media and the general public.

This guide is divided into two parts:

MEDIA RELATIONS will give you an over-view of how the media work and how you can use the media for promoting the Presidential Awards. This section will also give you specific suggestions on how to approach different members of the media with your ideas, how to package these ideas and finally how to present them in interview situations. Also included is a fact sheet on the Presidential Awards which can be used to answer members of the media's frequently asked questions.

COMMUNITY RELATIONS offers an alternative approach for getting your message out to the public. Included are strategies for approaching other organizations and community leaders in order to solicit their support and build coalitions. By enlisting the participation of well-respected individuals and local groups, the reputation of the Presidential Awards program will be extended and enhanced. One key element of building a grassroots coalition is persuasive public speaking and the ability to speak to different audiences. To that end, a number of suggestions on how to sharpen one's public speaking skills are included in this second section.

MEDIA RELATIONS

Introduction to the Media

Strong media contacts and solid relationships can be major benefits in drawing attention to quality math and science teaching and the accomplishments of your school, students, and colleagues. A good media relationship can make it easier to get through to a reporter or to convince a journalist to cover your story.

"Media" encompass both <u>print and broadcast</u> news organizations. Print media include daily and weekly newspapers, news wires and magazines; the broadcast media are television and radio. Each of these news organizations can be used in a number of different ways to reach various groups of people.

Remember that the media are under pressure to produce. Newspaper, radio, and TV reporters compete to get the most interesting story and the best quotes. What makes news is what interests people—how local and national events affect the community, new ways of doing things, and what makes life better, richer, or more colorful. The media are interested in the activities of people who make news and have power, and in what is happening in the world that affects people. They are usually more interested in what affects the wallet and stirs emotion than in concepts and ideas.

Always keep in mind that as a teacher, you are an expert in the field of education and an expert on teacher professionalism, whom the media can use as a reliable source at the local level.

- On't be afraid to approach the media with an issue or a story idea.
- ♦ Try to keep relationships with the media friendly and honest.
- Remember, they are doing their job—try to make it easier for them by maintaining open lines of communication.
- Access to the media is access to the public. The story they print or broadcast is shaped by information you provide.

Members of the Media Are Approachable

The following are two key points to remember when dealing with the media: (1) Don't be afraid to approach the media with an issue or story idea; and (2) Try to keep relationships with the media friendly and honest.

Make it easy for the media to learn about the events or priority issues of your school by maintaining open lines of communication. The easier you make it for reporters and editors to do their jobs, the more likely you are to receive favorable coverage.

Serving as an Information Resource

To be effective in getting your message out, you need to set yourself up as an information resource to reporters—someone they can turn to for background information and quick facts. You will find that the more visible your school becomes because of the Presidential Award, the more the media may call you for reference materials, guidance on their coverage, and your general insights. Regard this as a compliment—even though it requires handling the extra demands of the media. You should view the informational responsibility as a mutually beneficial part of your job.

Have on hand resources and information related to the Presidential Awards that will help reporters in covering stories, such as:

- ♦ Background on the Presidential Awards program;
- ♦ Information on the specific programs and lessons that you pursue at your school;
- Summaries of the kind of new things students learn because of your innovative science and math teaching;
- Data on local teachers, administrators, and schools.

Be familiar with the types of stories each publication or station covers and how they report the news. This will help you answer their questions and prevent you from leading them in a direction that is unsuitable for their reporting style (i.e. whether they often use vignettes or interview "real people").

Communication Tools

There are a number of ways to get your message out. The following section describes three main vehicles and provides "just-add-water" samples that you could use to draw attention to your activities.

Op-eds

<u>Purpose</u>: Opinion articles or op-eds are submitted to daily and weekly newspapers to express the author's position on a particular topic.

When to Use: Write and submit op-eds when you want to express your opinion on events and activities that affect the teaching profession and science and math education. These are good vehicles for explaining complicated issues—particularly when you feel that your ideas will not be communicated through regular news coverage.

<u>How to Use:</u> Before you start writing, it's a good idea to call the op-ed editor to see if they are interested in the topic and your perspective before you invest the time in preparing the piece. During the conversation, explain why your views are important to their readers.

Most papers have an op-ed review process that can take anywhere from one to ten days. Many of the larger dailies will require "exclusivity," meaning they will only consider your piece if they are the sole paper receiving it. Be aware of any exclusivity clauses before you call or send to other papers.

You can do a mass mailing to papers not requiring exclusivity by including a one-page "pitch" letter with your op-ed explaining why your opinion should be published, why it is current and relevant, and how your information will be of interest to the paper's readership.

Format: Your op-ed should...

- Have a title and indicate authorship (i.e. "Why Science and Math Education Are Important," by Joan Doe, teacher of eighth-grade mathematics, Anytown School);
- Be approximately 400-800 words in length—check with the papers in advance to determine their word count requirements;
- Be creative, but to-the-point. Editors like the use of vignettes and analogies, but want to know what's new up front;
- Be focused—many op-eds are rejected because the author never delivers a clear message with facts to back it up; and
- Include in parenthesis at the end the author(s), their title, and school.

Sample Op-Ed Pitch Letter

Date

To: Local Editorial Page Editor

From: Presidential Award Winner

Subject: Op-Ed

On June XX, I was one of 108 elementary/secondary mathematics and science teachers from across the country who received the prestigious Presidential Award for Excellence in Mathematics and Science Teaching (PAEMST) in Washington. The Award recognizes extraordinary teachers whose outstanding work in the classroom inspires the next generation of scientists, engineers, and mathematicians. Each award includes a grant of \$7,500 from the National Science Foundation (NSF) to the recipient's school to be used at the discretion of the teacher to promote mathematics and science education.

Winners of the Presidential Award exemplify creative and resourceful teaching strategies that help students learn important mathematics and science processes and concepts. We use our teaching experience and creativity to advance inventive curriculum and instruction, encourage professional development and outside activities among colleagues, and generate excitement among students, teachers, and parents about the uses of sciences and mathematics in everyday life.

I have prepared the enclosed op-ed that identifies the qualities that make us exceptional and explains how we differ dramatically from other teachers in the way we do our jobs and see ourselves. These differences speak volumes about what really works in terms of excellent classroom practices.

Should you have any questions about the op-ed or the Presidential Awards in general, please contact me at (phone number). I would appreciate your expeditious consideration of this submission.

I look forward to hearing from you.

Bottom's Up: Top Teachers Show How to Move America's Schools From Bottom of International Ranks

By Jane Doe

The weakness of America's schools in mathematics and science is no secret. On the Third International Mathematics and Science Study, U.S. eighth graders scored below the international average in mathematics and only somewhat higher than the international average in science. Not only did we average lower than Singapore, Japan, and Korea, but also lower than Bulgaria, Slovenia, and Hungary. For our graduating seniors the results are even worse. Out of 21 countries, our 12th graders outscored only Cyprus and South Africa. Even our nation's top students showed inadequate results. U.S. advanced students were second to last in advanced mathematics and last in physics.

For a nation as dependent on high technology and scientific innovation as the United States, these figures are not just scary, they're dangerous. Although not all of our children need grow up to be scientists, as citizens of the 21st century they will be called upon to make political decisions on scientific issues ranging from space exploration to nuclear waste disposal. America cannot continue as both a military and economic powerhouse if our schools do not give all of our children a high-level education in mathematics and science. Already, in many science, engineering, and mathematics fields, non-citizens comprise over half of those graduating from U.S. universities with a Ph.D.

In order to see how our schools can improve and enable more students to be successful, we must look to our best teachers to learn what they do. I was recently awarded the Presidential Award for Excellence in Mathematics and Sciences and traveled to Washington, DC along with other award-winning teachers who had all proven themselves exceptionally talented at helping students learn and achieve. I had the opportunity to participate in various seminars and professional development workshops with these educators and can say that their teaching is among the best that can be found in the United States, if not the world.

The techniques of these nationally recognized teachers offer many lessons for raising the quality of science and mathematics teaching to a world-class standard. First, these teachers cover the basics and then go beyond them. They offer their children high level content, introducing ideas from algebra into elementary school mathematics and exposing even young students to scientific reasoning, concepts, and principles. Second, they work with students to build their ability to think scientifically and mathematically through hands-on activities and exciting real-life projects. Their classes are filled with more experiments, labs, simulations, cooperative groups, and fieldwork, and less lectures, textbook reading, and worksheets. Finally, these teachers are always experimenting. Most were among the first to adopt technology in the classroom, and Presidential Awardees in mathematics are much more likely than other teachers to have students use calculators in class. Virtually all of these teachers are well aware of the national standards in their area and design their lessons to meet these standards.

For example, Linda Boland of Scottsdale, Arizona has her students study algorithms and patterns in fractals and chaos theory, compare stock prices, review averages and ratios, and

master computer spreadsheets – all in elementary school. Schyrlet Cameron of West Elementary School in Miller, Missouri teaches her class around the theme of a race car. Her students learn about how mass, force, friction, and design affect motion, and conduct a variety of scientific experiments on model cars. Dennis McCowan of Weston High School in Weston, MA refuses to allow any student to fail. Students receiving the grade of N (for not-yet competent) are required to do extra work and repeat the assignment until they achieve competence. Digna Ortiz at the Francisco Morales High School in Naranjito, Puerto Rico emphasizes individualized learning and real-world problem solving. She takes chemistry students out of the lab to collect and analyze samples of soil, water, plants, leaves, and flowers.

We need to help all our teachers become better in the classroom and inspire their students the way these Presidential Award winners do everyday. To do this, we need to give our science and mathematics teachers more training. Three out of ten secondary school mathematics teachers do not have even a minor in mathematics and only half (52.6%) have both a state license and a major in this field. The situation is only slightly better for science teachers, where only 62.5% have both a license and a major in a science-related field. Even those who have a major may need additional training in the latest instructional methods and in better ways of meeting the standards. Also, we need to give our teachers the freedom to experiment and be creative. We should not shackle potential Presidential Award-level teaching and learning with excess requirements and mandates.

Winners of the Presidential Award for Excellence in Mathematics and Science Teaching prove that U.S. teachers – and their students – can reach world-class levels of performance. If we truly wish to raise the achievement of our students, we should establish the classes of these excellent teachers as models and take steps to help more teachers follow their lead.

Letters to the Editor

<u>Purpose:</u> Letters to the editor are used to respond—negatively or positively—to an article or editorial that a newspaper, journal, or magazine has printed on an issue. They allow you to communicate your opinion without going through the editorial approval process required for publishing op-eds.

When to Use: You should write letters to respond to editorials or to news coverage that have some relationship to your concerns. For example, if an article appears on how students are failing at math and science in your district, you could respond and write about a program or lesson in your school that is making a difference to combat this trend. Don't expect your letters to be printed every time. Most papers have policies on how frequently they will publish the same writer's views.

<u>Format:</u> Your letter should carry its most important message in the first paragraph. If your letter responds to an article or editorial printed in that paper, reference the title, date and author of the original piece in your opening sentence. The letter should be between 100 and 400 words, but the shorter it is, the more likely it will be printed.

<u>Timing:</u> Many papers will print several responses to one article on the same day and will therefore often wait to accumulate others on the same issue. It's not unusual to see letters to the editor regarding material from two months past.

You should, however, respond as soon as possible—usually within a few days to a week of a story's appearance. Check several of the responses in the "Letters to the Editor" section in your local papers to get an idea of the newspaper's time-frame for printing letters.

Sample Letter to the Editor

Date

Dear Editor:

There is no question that students at (school) can do more and raise their achievement in both mathematics and science. But what is the community doing to encourage students to succeed? We send a clear message to our children when we recognize athletes more than scholars, or when we allow our children to work in local fast food outlets before completing their homework. Every time a parent tells a child, "You know, I never was good at math either," or a neighbor acts surprised that a girl is taking an advanced mathematics class, we are discouraging children from achieving.

Recently, I was chosen as one of the winners of the Presidential Award for Excellence in Mathematics and Science Teaching. I did not earn this honor alone, but in response to the students who challenged me to do more, to find new ways of explaining the material, and to create more interesting projects and assignments. In my classroom I have seen what students can do when properly encouraged. I have also seen apathetic students who seem to have become "terminally tuned-out" long before they entered my classroom.

If we truly wish our students to reach higher standards needed to be effective, creative, innovative, and educated citizens, employees, and family members—we must raise our expectations for what children can do and provide more encouragement for success. The effects of a quality education for our children—or the lack of such an education—will be felt not only by parents and teachers. It makes an impact on everyone who is served by a former student at a grocery store, a hospital, or a bank. And, of course, we all benefit from the government services paid for by educated workers who provide tax revenue.

Sincerely,

Name Title Address Town, State Zip Code Phone Number

Communicating With the News Media

In working with the media, make sure to pay attention to the following communication tips. These tips will help you in thinking about the best ways to draw attention to the efforts of your school in developing quality math and science programs.

How to Craft Effective Talking Points

Make it Salient: Make sure that the points you make grab the attention of your target audience and hold their long-term interest.

Use Colorful Language: Everyone remembers a clever turn of phrase, vivid image, and a passionate plea.

Recoin Clichés: Our language is full of clichés that resonate with the public. Altering a cliché to fit your message will draw attention.

Use Tag Lines: Often used in advertising, tag lines identify an item or an idea in a short and memorable moment.

Offer Useful Analogies: Often, your audience will not understand what you are talking about unless you relate the concept to something they may know much better.

Offer Common Sense: Restate the obvious in a new way people can easily comprehend.

Shatter Myths: Just as records are made to be broken, myths are meant to be shattered. Don't hesitate to clear the air or set the record straight.

Stress the Bottom Line: People care about student results and their costs—not about process, possibilities, and plans.

Offer the Big Picture: While it is important to stress the key points and offer valuable examples and detail, make sure you don't forget the big picture. The "vision thing" is crucial in framing your argument.

Additional Interview Tips and Techniques

Before any interview, there are a few basic steps you should take to help ensure that everything goes smoothly:

- Try to find out as much as you can about the interviewer and/or the program you will be appearing on, including:
 - · Has the reporter/program done anything on the Presidential Awards program or math and science education in the past?
 - · Do you know if the reporter/host has a positive attitude toward these issues?
 - · What is the reporter/host's interview style?
 - · Will you be appearing with other guests?
- Send background materials to the reporter conducting the interview or the producer setting it up. They should include:
 - · Facts and background information about the issue you are going to discuss;
 - · Information on yourself and your school; and

- · Relevant news clips on the issue.
- Prepare talking points on the issue you will be discussing. Speaking from talking points allows you to have more control over the direction the interview takes and will help to brief you on difficult or complicated issues.
- ♦ Predict difficult questions that may arise and prepare possible responses.
- ♦ Confirm the time, date, and location of the interview in advance. <u>Be on time</u>.
- Find out when the interview will run and be sure to get a copy of the final piece. This way you can find out what the public saw or heard, particularly if your interview is edited, and you can also evaluate your performance in the interview.

Special Guidelines for Print Interviews

Over the years, journalists and their sources have developed a code of conduct to protect people who want to provide information but are concerned for one reason or another about being identified, by name or otherwise.

The best and simplest rule is never to tell a reporter anything that you don't want to read in print, see on television, or hear on the radio. If you have nothing to hide and particularly when discussing a positive news story, be very open with the reporter. However, from time to time there will be cases where you will want to tell a reporter something that you don't want attributed to you.

Tell reporters at the <u>outset</u> what your pre-conditions and groundrules are for the interview. Reporters will assume that everything you say to them will be on the record and for quotation—unless you tell them differently.

Tips for Television and Other Public Appearances

The key to dressing for TV or for public appearances is to get others to pay attention to \underline{you} and what you have to say . . . not to what you are wearing or how you look.

Here are some guidelines:

- ♦ Colors: Wear solids—brights for women and subdued colors for men.
- Make-up: Apply make-up normally for women. Men should be made-up or powdered to remove glare. (Most TV studios have make-up artists to handle this.)
- ♦ Dress:

Do NOT wear large or flashy prints or patterns.

Do NOT wear white, black, shiny, or glittery fabrics.

Do NOT over accessorize (i.e. large scarves, loud ties, shiny jewelry, hats).

NOTE: If you can avoid wearing glasses, do so because of the glare. If you appear on television frequently, try to get glasses that are non-glare or the non-glare spray for glasses.

Special Guidelines for Television and Radio Interviews

For some people, interviews can be the most dreaded of experiences—but they <u>don't</u> have to be. If you are prepared, you can control the interview. Television and radio are among the most effective means of generating public awareness. The following are some special considerations for TV and radio interviews:

Before the Interview

Anticipate what questions will be asked and prepare your responses to them.

- Prepare and practice talking in "soundbites" (:15 to :30 second responses). The more adept you are at giving succinct answers, the more useful your responses will be to the overall program, especially if there will be others interviewed.
- Review relevant facts, statistics, and specific examples so you will be ready to offer strong commentary to support your message.
- Get to the studio early and meet the host before you are interviewed. Decide how you will address one another—formally or by first names. (First names generally make you feel more at ease and tend to result in a more relaxed interview overall.)

During the Interview

- Be aware of your audience. Remember that although the interviewer is asking the questions, individuals in the audience and/or at home are watching or listening. You may want to pretend the camera is a person and you will feel more natural turning towards it and making points in its direction.
- If you are doing an interview that is taped and will be edited later, remember your entire interview will <u>not</u> be aired, so establish the point you want to make first and then elaborate.
- ♦ Be brief and to the point. Time is limited.

Final Suggestions in Talking to the Media

In general, you have a great deal of leeway in your relations with local media.

Whenever possible, you should:

- A Reach out to the media about an issue of news value.
- ♦ Set up interviews, discussions, articles and events for the media around your concerns.
- Answer any questions the media has about your activities.
- Work to encourage substantial favorable coverage about the teachers, schools and volunteers who work with you.

You should not:

- ♦ Answer leading questions.
- ♦ Fill in dead air if you feel you have already answered a question.
- ♦ Get angry with the reporter.

Fact Sheet

On the following page we have included a sample Fact Sheet about the Presidential Awards program that is useful in answering reporters' basic questions.

Presidential Awards for Excellence in Mathematics and Science Teaching

FACT SHEET

<u>Media contacts:</u>
Bill Noxon (703) 306-1070
Doug Baj (202) 667-0901

The Presidential Award for Excellence in Mathematics and Science Teaching (PAEMST) is the nation's highest commendation for K-12 math and science teachers. It recognizes a combination of sustained and exemplary work both in, and outside of, the classroom. Each award includes a grant of \$7,500 from the National Science Foundation (NSF) to the recipient's school. Winners use the money at their discretion to promote math and science education. Awardees also receive an expense-paid trip to Washington, D.C., during which each receives a recognition certificate signed by the President. Awardees also attend seminars and engage in professional discussions with their peers and with national legislators and education policymakers. Each awardee also receives a selection of gifts from private-sector contributors to the program.

Frequently Asked Questions:

Q. What are the PAEMST selection criteria?

A. The program is open to practicing public-, private- and parochial-school teachers with a minimum of five years of experience. Candidates are then chosen on the basis of their teaching performance, their background and their experience. This includes an evaluation of their formal education and continuing educational experience as well as professional and other activities related to their teaching. Applicants are asked to demonstrate how their teaching enables students to learn important math and science processes and concepts. They must also provide letters of support for their application from colleagues; current or former students; parents of current or former students; or their supervisors.

Q. How are recipients selected?

A. Awardees are selected from those eligible teachers who have completed an application, obtained from NSF or from the science or math coordinator at their state education department. Applicants provide documentation of their background and evidence of professional success to state selection committees of their peers. The National Council of Teachers of Mathematics (NCTM) oversees state selection procedures in math, the Council of State Science Supervisors (CSSS) those in science.

The committees choose six math teachers (three elementary, three secondary) and six science teachers (three elementary, three secondary). These 12 state-level finalists are recognized by the national program and in their individual states or political jurisdictions. All 12 of these teachers

are candidates for the presidential award. One science and one math teacher at each level are recommended as presidential awardees by national selection committees of distinguished scientists, mathematicians and educators. The White House chooses the presidential awardees and makes the official announcement of the winners.

Q. What are the citizenship requirements for nominees?

A. Applicants must be U.S. citizens who teach in one of the 50 states, the District of Columbia, Puerto Rico, the Department of Defense Dependent Schools, or the U.S. territories of Guam, American Samoa, the Commonwealth of Northern Marianas or the Virgin Islands.

Q. When was PAEMST established?

A. Former President Ronald Reagan signed into law a measure establishing the program in 1983 (P.L. 98-377). The law was amended in 1988 to include elementary teachers (P.L. 100-570). The teacher enhancement program of NSF's division of elementary, secondary, and informal education administers the program for the White House.

Q. How many recipients are honored this year?

A. There are 107 elementary and 107 secondary recipients this year, one teacher of science and one teacher of math at each level, chosen from each of the 50 states, the District of Columbia, Puerto Rico, Department of Defense Schools, and the U.S. Territories.

For more information, contact: Presidential Awards for Excellence in Mathematics and Science Teaching, Directorate for Education and Human Resources, National Science Foundation, 4201 Wilson Boulevard, Arlington, Va. 22230, (703) 306-0422. On the World Wide Web at http://www.ehr.nsf.gov/EHR/ESIE/awards/core.htm

COMMUNITY RELATIONS

Despite the power of high technology, face-to-face communication still can be the most convincing way to promote math and science education and the Presidential Awards. When teachers, parents and administrators talk about the Presidential Awards in their homes and offices or on the streets, they can discuss the role of math and science in the real world, share in each other's visions on education, and spread the word about the program.

While newspapers and television appearances can make people aware of issues, the personalized, human approach is more persuasive when it comes to addressing individual schools and teachers. Enlist the participation of individuals who are trusted, well-known, and respected. People are often influenced by what their friends and neighbors consider important or valid.

Developing Organizational Resources and Sustaining Momentum

Expanding the Presidential Awards on a state-by-state grassroots basis requires the time and energy of a great deal of people. This means building a real support network and working continuously to expand your organizational base.

You can expand on your initial efforts through the following initiatives:

- Form partnerships. Bring together several complementary efforts or programs so that they can share resources and build on each other's strengths.
- Develop networks to communicate with Presidential Awards organizers and winners in your state and across the country.
- Ask the local newspaper, radio, and television stations to run stories about the Presidential Awards winners, specifically, and the program in general.
- Get members of your team to talk to groups in the community about Presidential Awards programs.

Cast a wide net for potential supporters. Focus on what they can do for your initiative, as well as what they might get out of becoming active partners. What kind of influence do they wield over the system and the important players in media and education? How will their involvement benefit students, teachers, and administrators?

Some types of organizations and individuals to target for participation and support include:

Education

School board members PTA members Superintendents Principals Teachers
Representatives of teachers union
Students
School guidance counselors

Community

Community-based organizations Civic groups Museums Job training groups Foundations

Elected Officials

Municipal government officials Mayors State legislators

Business

CEOs Community affairs personnel Corporate foundations Chamber of Commerce

Making Presentations to Other Organizations

Contact the heads of each organization and ask for a few moments to address the group's next meeting. You may want to send a letter similar to the one on the next page, and then follow up with the individual and try to schedule a time to speak during the organization's next meeting. The meeting will provide an opportunity to inform the public about the Presidential Awards program and how they can encourage the involvement of their local schools and teachers. Make sure to collect the names, addresses, phone numbers, and FAX numbers of participants. Circulate a sign-up sheet or pass out index cards with instructions for each person to write down their contact information and the names of any math and science teachers they believe deserve recognition.

In delivering remarks, try to connect with the special concerns of the audience and use examples to illustrate key points. Leave plenty of time for questions and answers, and never leave a presentation without making sure the assembled know how and where to contact you for follow-up.

Sample Letter to Solicit Speaking Opportunities

Name Address

Dear Group Leader,

This June, more than 200 mathematics and science teachers from across the nation journeyed to Washington to accept the prestigious Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST). The Awards recognize extraordinary teachers whose outstanding work in the classroom inspires the next generation of scientists, engineers, and mathematicians. I had the honor of being selected as one of these teachers.

Because (name of organization) is recognized as an organization of concerned citizens who are interested in addressing and solving our community's problems of the day, I write to request an opportunity to speak at your next meeting. I want to discuss my successes in the classroom, apprise you of steps being taken to improve teaching standards, both at the state and national level, and suggest ways in which we can once again pique student interest and participation in mathematics and science (especially with our girls).

The Presidential Awards for Excellence in Mathematics and Science Teaching is the nation's highest commendation for kindergarten - twelfth grade mathematics and science teachers. It recognizes a combination of sustained and exemplary work both in and outside of the classroom. Each award includes a grant of \$7,500 from the National Science Foundation (NSF) to the recipient's school to be used at the teacher's discretion to promote mathematics and science education.

Traditionally, winners of the Presidential Award are teachers who exemplify creative and resourceful teaching strategies that help students learn important mathematics and science processes and concepts. Presidential Award recipients have an average of 24 years in the classroom. We wield our experience to advance inventive curriculum and instruction, encourage professional development and outside activities among colleagues, and generate excitement among students, teachers and parents about the science and mathematics in everyday life.

I will follow up with you in the coming days to determine the best time for me to address your group. In the meantime, if you have any questions or would like to receive further information about the Presidential Awards, please don't hesitate to call me at (phone number). I look forward to your favorable response.

Name

Working with Community Leaders

Every community has business, civic, and political leaders. Convince them to support the Presidential Awards program and its winners and enlist them to help persuade others to join the effort. Schedule individual meetings with these leaders to explain what your group is trying to do for math and science education. Outline a few specific actions they could undertake. Political leaders might join the coalition or address your concerns in their platforms and policy initiatives. Draw connections between your priorities and the leader's. Explain why improving education is important to their constituency. If a leader is not immediately interested in the program, try to keep the lines of communication open. Even if they don't offer their support now, regular communication may benefit you later down the line.

In particular, you want to enlist the support of your local school officials and educate them about the Presidential Awards program and its mission of improving math and science education. The following page contains a sample thank you letter to local school officials acknowledging their contribution to your success and asking for their continued support.

Sample Letter to Local Officials

Date

Name
Title
Address
Dear (School Administrator/Community Leader/Elected Official),
Last month, I was among 108 (elementary/secondary) teachers from across the country who traveled to Washington, DC, to receive the prestigious Presidential Award for Excellence in Mathematics and Science Teaching. The program, a joint effort of the White House and the National Science Foundation, recognizes mathematics and science teachers whose innovative approach and commitment to quality help boost student achievement and school success.
I am writing to let you know of the award and to thank you for your efforts to create a school and community environment which fosters excellence. Teaching at (name of school) has given me the opportunity to work with talented educators who support my work and administrators who genuinely care about the quality of the education we provide all our students.
While in Washington, I participated in a series of seminars and workshops in which the Awardees shared insights about successful teaching methods and developments in education. We also heared from nationally known education experts and representatives of leading organizations who shared their knowledge of effective approaches to teaching and learning in science and mathematics. The week provided timely and valuable information and helped uncover new insights that I will share with my colleagues upon my return.
Once again, thank you for your support of high quality education in (city) which has contributed to me receiving this great honor of the Presidential Award. I will keep you posted how our school and district can work to improve mathematics and science education for all our students.
Sincerely,
Name

Hosting Special Events

Large numbers of people can be reached in a very positive way through well-conceived, well executed special events. Parades, picnics, flea markets, street fairs, food tastings, bake sales – members of your organization can use these events to spread information about the Presidential Awards and promising or effective strategies to improve math and science learning. These events can also generate news coverage.

When setting up a booth or exhibit:

- Have plenty of Presidential Awards literature and application forms.
- Use an easy-to-read, eye-catching sign that gives a clear message.
- Staff the booth or exhibit with informed, personable volunteers who will encourage conversation with visitors.
- Rotate the volunteers regularly.

Careful timing of special events is essential. Timing variables may include:

- Guest speaker availability.
- Season of the year (outdoor events).
- Competition with other major events.

How to Sharpen Public Speaking Skills

Successful grassroots communication hinges on the organization's leaders' ability to speak to diverse audiences. As a Presidential Award winner and ambassador of the program, you may be called upon to speak to large, and small, groups of people in various environments. Some suggestions on how to make the most of these opportunities include:

Get ready. There is no substitute for preparation. A good speech is made up of great content (substance) and delivery (style). To create both takes time and effort.

Know your audience. Who will you be addressing? How many people will be in the audience? Ask the age, educational background, special interests, and activities of the group's members and their potential familiarity with your issues.

Arrive early. Be there early enough to watch the room fill up. Greet people you know. This will make you more comfortable and keep you from being shocked by a large crowd.

Personalize your message. The goal of the speaker is to deliver information the audience believes it needs. Your speech must have value to the audience. It will never grab the audience's attention if the audience believes, for instance, that although our public schools need vast improvement, there is no threat to them, because they have no children of school age.

Talk—don't lecture. Aim to be understood, not to impress. Eliminate professional jargon. Use statistics sparingly. Make generous use of personal anecdotes, examples, and experiences the audience can relate to. It is not the role of the speaker to prove how smart he or she is, but to effectively communicate.

Say it and say it again. It is important in oral communication to repeat key points. Tell the audience what you are going to say in your opening remarks. Tell them, in the body of your remarks the details or supporting information you want them to know. And finally, in your conclusion, summarize what you just told them.

Write out your remarks word for word. Then read them aloud. Ask someone not in your profession to listen and react. Were you interesting? Did you make sense? Were you understood? Most importantly, what was your message?

Rehearse. Practice so many times that you have your remarks nearly memorized. If you are able to become so comfortable you can speak from notes, use only an outline.

Be ready for the unexpected. The room or crowd may not be what was promised or what you had in mind.

Dress attractively. Wear stylish but conservative clothing so the audience is listening to your remarks, not staring at your attire. Avoid bright white shirts or blouses that will reflect a visual glare under the lights on a podium.

Make the audience like you. Establish eye contact. Share something personal about yourself—a story your listeners can relate to that leads into the issue.

Tell jokes sparingly. Humor is nice, but few of us are comics.

Vary the pitch and speed of your voice. Let your excitement or passion for the subject show. The most memorable or convincing speakers are those who speak from the heart.

Use your body. Emphasize points with your hands, face, and upper body to bring additional animation to your remarks.

Use visual aids. But only use them if they add to the understanding or impact of your remarks. Dimming the lights can be negative, especially during a presentation following a heavy meal or during an evening session. Instead, have handouts ready that you might give to people as they leave the session.

Gauge your audience response. Make adjustments accordingly. Beware of fidgeting and whispering. It is better to bring your remarks to an early halt and take questions than bore the audience.

Be brief. In general, limit your remarks to 20 minutes. Most people, especially in the evening, have a short attention span.

Enjoy yourself. You are prepared. You have an important message and mission. If you are enjoying yourself, chances are your audience is too.

Holding Regular Meetings

Once you have convinced community leaders and organization members to join you in promoting the Presidential Awards, the next step is to maintain their support and interest in the program. Rather than relying entirely on chance conversations, good grass-roots strategists organize regular gatherings to build support for the community campaign and to help spread the word.

Regular meetings also present opportunities to recruit new members. Advertise meetings or send news releases to local media. Create fliers for posting at local stores, libraries, offices, or schools. Ask school leaders if they can provide notices for students to take home to parents. See if the local convenience store or supermarket will drop a flier in with each customer's purchase.

At the meeting, welcome new faces. Make sure no one leaves without giving his or her name, address, phone number, and FAX number. Place follow-up calls a few days later to thank participants for coming and ask for their reactions or comments.

Hold meetings in different areas. Look for places where community members already come together. This helps to show that your team is concerned with everyone and all areas of the community. Some communities have strong neighborhood loyalties, and community meetings that are held only in one school's auditorium may not gain their confidence.

Building A Database

If you have access to a personal computer, invest in an easy-to-use database package to store and manage lists for mailings and meetings or to track information for inclusion in a local goals report. If your organization does not have readily available computing power – either at a central business location or through one of the members of your coalition – it is important to keep track of lists and other information the good old-fashioned way. Create inventory forms and be sure to update materials often.

Leaflets, Brochures, and Fact Sheets

Leaflets, brochures, and fact sheets can be produced relatively quickly to get out information to the community.

Leaflets need to attract the reader's attention immediately and get the point across simply. Be brief. Select an eye-catching headline and drop-in a graphic illustration from "clip art" books or software packages. Use big and bold print and easy-to-reproduce standard-sized paper. People should be able to scan the message as they pause by a bulletin board or in the time it takes to walk from the distribution point to the nearest trash can! Design a leaflet as you would a poster – eye-catching and instantly understandable.

One variety of leaflet is the fact sheet. Fact sheets generally contain more information than leaflets and have a somewhat longer life than the typical leaflet. (See sample fact sheet in **Media Relations** section.)

Brochures are usually more expensive, multi-page publications printed in color on heavy or glossy paper. Be sure that the purpose of the brochure really justifies the cost and effort. Brochures are especially good handouts when you want to make a strong and favorable first impression – when speaking to an influential community group, for example, or exploring an issue that requires thorough treatment.

Telephone Banks and Telephone Chains

Telephone banks are an effective tool for maintaining contact with your supporters and increasing attendance at an event. A phone bank works best when a few members can gather in a central location away from home – callers are more likely to enjoy the experience and can more easily share information and tips when they are working together at the same site. Business or civic groups with a number of phones in one location may be willing to offer their facilities so your team can make local calls after business hours.

A less expensive alternative for reaching a smaller number of people is to establish a phone chain where each member agrees to call three other members to deliver an important or timely message.

The chain should be set up so that the person initiating the message calls a small group (such as the leadership team), the leadership team calls other active members, and the active members call everyone else. Check with the last person in the chain to make sure that the message went through. There should also be a bypass mechanism so that someone who is out of town doesn't break the whole chain. Participants should agree that if they cannot reach the next person on the telephone chain, they should select an alternate to make that person's calls.

Circulate copies of the phone chain at meetings so that new members know how they may be contacted and can participate in an important organizational structure. Leaders will find the phone chain to be a quick and reliable means of getting in touch with membership without having to call each person directly.

Your Feedback and Comments for the National Science Foundation and The Widmeyer-Baker Group

Both the National Science Foundation and The Widmeyer-Baker Group would appreciate your feedback and comments on this guide and presentation. Please let us know how these suggestions have helped you promote the Presidential Awards for Excellence in Mathematics and Science in your local community and state. We look forward to finding out which techniques you found the most successful and the easiest to implement. Also, we would appreciate hearing about any of your own media and community relations techniques with which you have had success. Please direct your comments and suggestions to:

Bill Noxon National Science Foundation 703/306-1070 wnoxon@nsf.gov

Doug Baj The Widmeyer-Baker Group 202/667-0901 dougb@twbg.com

If you have any other questions or comments regarding the Presidential Awards for Excellence in Mathematics and Science, please contact:

Janice Earle
Program Director of Assessment Activities
National Science Foundation
703/306-1614
jearle@nsf.gov